

# Leveraging Medical Operations in the Work of HRP Exploration Medical Capability

Human Research Program  
Exploration Medical Capability Element

February 7, 2023

Emily Stratton, DO, MPH<sup>1</sup>

<sup>1</sup> *University of Texas Medical Branch and KBR*

“Expanding the Boundaries of Space Medicine and Technology”

- **Background**
- **Methods**
- **Discussion**
- **Lessons Learned**

- Aerospace Medicine seeks to prepare humans for the next step of exploration
- NASA's medical operations team and research teams are distinct entities
  - Clinicians typically work for one division or the other
- “Blended Clinician” acts as a bridge

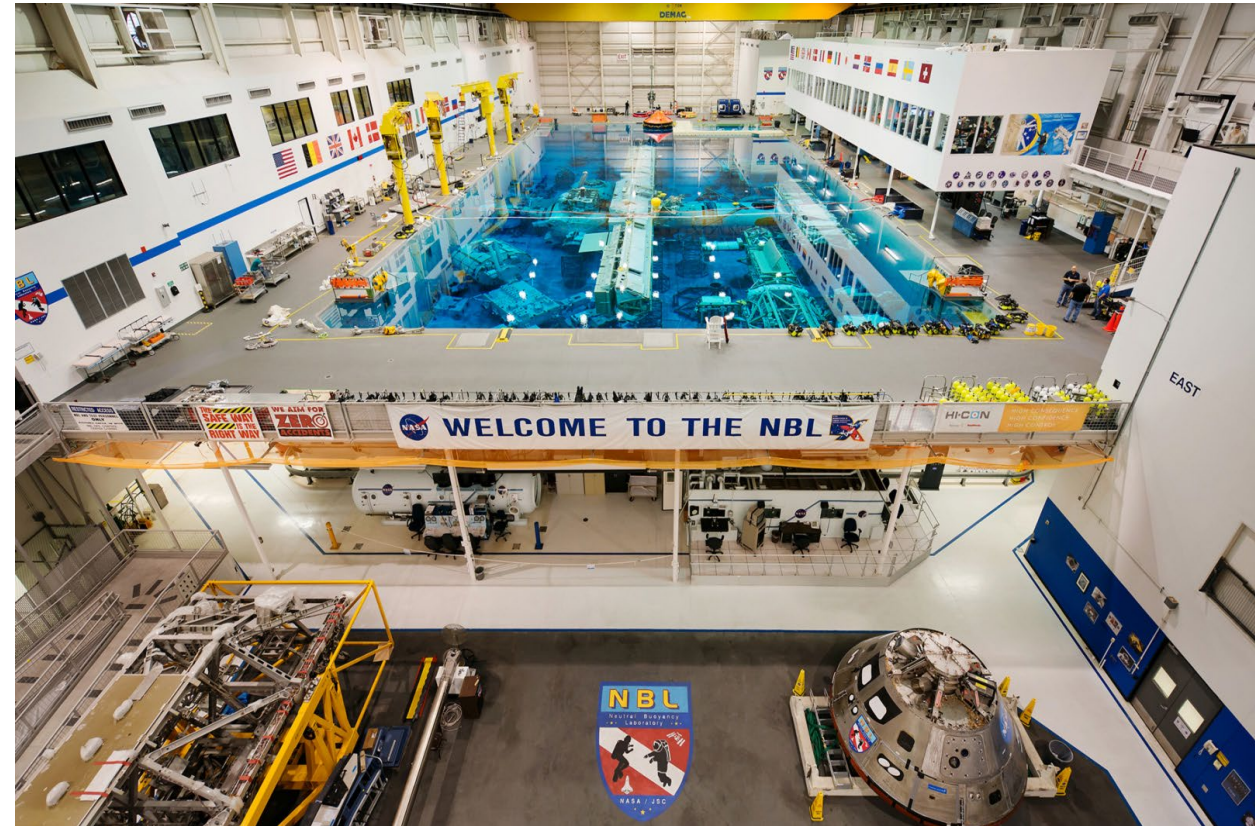




- **Blended Clinician job description**
  - Raise awareness of current ExMC research efforts within medical operations community while providing insights back to the HRP ExMC team
  - Advise and interact with Element and Project scientists regarding likelihood of successful transition of current research projects to operations



- Purpose
  - Consensus on roles and responsibilities
  - Adapts and has flexibility
  - Example
    - Emergency Diving Accident Management course
      - » One week course to get certified to work as a Medical Offer at the Neutral Buoyancy Laboratory





- Blended clinician works with NASA SD and SF
- Goal to be console certified ASAP
  - What does this mean?



- Goal to provide operational insight to the research community
- Transition of HRP research technologies to current operations
  - HemoCue®
  - Procedural guidance software
    - Autonomous medical officer support
  - Tempus ALS®

Tempus ALS®



HemoCue®



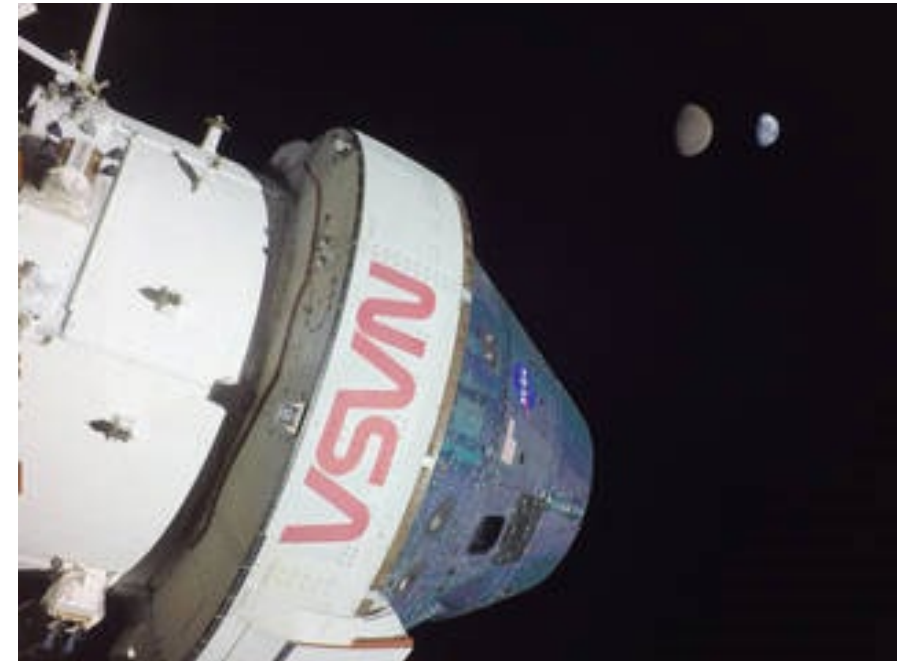


- Goal to provide operational insight to the research community
- Improve medical operations concepts for future medical capabilities
  - Understanding Low-Earth Orbit (LEO) procedures and how they translate to autonomous system





- Goal to provide operational insight to the research community
- Take part in Exploration Medical Integrated Product Team (XMIPT) meetings
- Improve bidirectional communication
  - Make products relevant
- Example
  - Artemis II Medical Kit cross-referenced to MedID



- Too many hats?
  - No, not really
- Important to ask for feedback
  - What has worked and hasn't?
- Training for console along with multiple new flight surgeons
  - Helpful
- Offer essential medical operations insight during ExMC meetings
  - Description of certain procedures already in use



# Thank you! Questions?

“Expanding the Boundaries of Space Medicine and Technology”